

Remarks

Claims 3 and 5 - 17 are pending. Favorable reconsideration is respectfully requested.

Claims 1 and 2 have been cancelled and replaced by new claim 16 which incorporates the limitations of claims 1 and 2. Claim 3 is made dependent on claim 16.

Claim 4 has been cancelled and replaced by new claim 17, which also incorporates into the apparatus, the subject matter of the method claims 1 and 2. No new matter has been added. As a result of the amendments to claims 1 and 4, presented as new claims 16, 17, withdrawal of the rejection of these claims under 35 U.S.C. § 102(b) is solicited.

The Examiner rejected claim 2 as obvious under 35 U.S.C. § 103(a) over *Gilham* in view of *Kamen* and *Levitan* et al. However, none of the three documents discloses or suggests the calculation of a virtual electronic scatter plot and the electronic checking of the plot for the presence of a prescribed geometrical point structure.

The invention produces a virtual image corresponding to the diagram shown in Figure 4 of the application, and the image is electronically compared with a predetermined, similar diagram on a point-by-point basis. A visual display of the diagram is not produced. The visual display mentioned in claim 2 is a display that represents the result of the electronic evaluation of the virtual images in the computer and may, for instance, include a number of differently coloured LED lights, as explained on page 8, lines 15 to 19, of the description. The visual display is a state signal, not a scatter plot, which would be meaningless to the average patient.

In contrast, *Gilham* is concerned with a visual display of the scatter plot on a screen as shown, e.g., in Figures 6 and 7 and explained in the appertaining description.

Kamen does not teach the comparison of a virtual scatter plot with a virtual standard image. Instead, a certain range of values is defined, and the patient's heart is judged when a value derived from the heart lies outside the range. According to column 9, lines 34 to 38, a standard deviation measure is performed, and outliers are removed to prevent excess variants. This is in total contrast to the image comparison performed in accordance to the invention, where occasionally occurring events ("outliers") are to be taken into account; compare the description in the present application from page 3, line 25, to page 4, line 5.

No electronic image comparison is performed by *Levitan* et al. either. Instead, a recurrence plot such as shown in Figures 5A to 5C is generated on the basis of complex mathematical calculations, and the recurrence plot is visually displayed for inspection. Again, occasional outliers or "fluctuations" are disregarded; see column 5, lines 13 to 19.


Withdrawal of the rejection of claims 3 and 5 - 8 over *Gilham* in view of *Kamen* and *Levitan* is solicited.

Claims 9 -15 have been rejected over *Gilham*. However, these claims contain limitations that *Gilman* does not teach or suggest, due to the amendment previously submitted. The comments previously presented with respect to the §103(a) rejection of claims 3 and 5 - 8 over the combination of reference are relevant here as well. Moreover, Applicants find no disclosure of the specific subject matter of these claims in any of the references. The claims require more than standard analog or digital devices, but also the connection and operation of these devices as set forth in the claims. There is no evidence of these in the record, and while the devices *per se* may all be known, their interconnectivities and functions defined by the claims are not.

Applicants submit that the claims are now in condition for Allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the Application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

A check in the amount of \$450.00 is enclosed to cover the Petition fee. Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,
EDMUND SCHIESSLE et al.

By 
William G. Conger
Reg. No. 31,209
Attorney/Agent for Applicant

Date: Nov. 1, 2005

BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351